

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior versions, and listings of the claims in the application:

1. (Previously Presented) A gas sampling assembly comprising:
a filter portion including a housing having an upstream first end, a downstream second end, and a gas flow path defined through the housing from the first end to the second end;
a sample collection portion including a body section having a sample chamber defined therein, wherein the body section is coupled to the downstream second end of the housing such that the housing and the body section define a unitary assembly and the sample chamber is in fluid communication with the gas flow path in the housing, and wherein the body section includes an energy transmissive portion such that a constituent of a gas in the sample chamber is adapted to be monitored through the energy transmission portion; and
at least one filter element operatively coupled to the housing.
2. (Previously Presented) The gas sampling assembly of claim 1, wherein the filter element includes an upstream closed end and a downstream open end, and wherein the upstream closed end of the filter element is a looped end formed by the filter element being folded back on itself.
3. (Original) The gas sampling assembly of claim 1, further comprising a gas sampling line coupled to the upstream first end of the housing.
4. (Original) The gas sampling assembly of claim 3, further comprising a conduit in fluid communication with the sample chamber to permit communication of gases out of the sample chamber.
5. (Original) The gas sampling assembly of claim 1, wherein the housing and body section are integrally formed from a unitary material.

6. (Previously Presented) The gas sampling assembly of claim 1, wherein the body section includes:

a gas sample collection chamber defined in the body section upstream of the sample chamber, the gas sample collection portion configured to collect filtered gases therein; and

a conduit defined in the body section upstream of the sample chamber and downstream of the gas sample collection chamber, the conduit communicating the gas sample collection chamber with the sample chamber.

7. (Previously Presented) The gas sampling assembly of claim 22, wherein at least one of the filter element is coupled to the termination block such that the downstream open end protrudes from a surface of the termination block in a direction toward the sample chamber.

8. (Previously Presented) The gas sampling assembly of claim 22, wherein all of the filter elements are coupled to the termination block such that the downstream open ends do not protrude from a surface of the termination block.

9. (Previously Presented) The gas sampling assembly of claim 22, wherein the at least one filter element includes an upstream closed end and a downstream open end, and wherein the housing includes a filter chamber defined therein in which at least the upstream closed ends of the filter elements are located, wherein the body section includes a conduit communicating the sample chamber with a downstream end of the termination block, and wherein a diameter of the filter chamber and a diameter of the conduit are substantially the same.

10. (Previously Presented) The gas sampling assembly of claim 22, wherein the at least one filter element includes an upstream closed end and a downstream open end, and wherein a plurality of the filter elements are coupled to the termination block such that the downstream open ends of the plurality of filter elements are disposed in a linear array.

11. (Previously Presented) The gas sampling assembly of claim 1, wherein the at least one filter element is a hollow hydrophobic fiber element.

12. (Previously Presented) A sidestream gas monitoring system comprising:

(a) a sampling line having a first end and a second end for carrying a flow of gas from a patient circuit;

(b) a gas sampling assembly comprising:

(1) a filter portion including a housing having an upstream first end, a downstream second end, and a gas flow path defined through the housing from the first end to the second end, and wherein the upstream first end is connected to the second end of the sampling line,

(2) a sample collection portion including a body section having a sample chamber defined therein, wherein the body section is coupled to the downstream second end of the housing such that the housing and the body section define a unitary assembly, and the sample chamber is in fluid communication with the gas flow path in the housing, and

(4) at least one filter element operatively coupled to the housing; and

(c) a detecting system adapted to measure a constituent of gas contained within the sample chamber.

13. (Previously Presented) The system of claim 12, wherein the at least one filter element includes an upstream closed end and a downstream open end, and wherein the upstream closed end of the filter element is a looped end formed by the filter element being folded back on itself.

14. (Original) The system of claim 12, further comprising a conduit in fluid communication with the sample chamber to permit communication of gases out of the sample chamber.

15. (Original) The system of claim 12, wherein the housing and body section are integrally formed from a unitary material.

16. (Previously Presented) The system of claim 23, wherein the body section includes:

a gas sample collection chamber defined in the body section upstream of the sample chamber and downstream of the termination block, the gas sample collection portion configured to collect filtered gases therein; and

a conduit defined in the body section upstream of the sample chamber and downstream of the gas sample collection chamber, the conduit communicating the gas sample collection chamber with the sample chamber.

17. (Previously Presented) The system of claim 23, wherein the at least one filter element includes an upstream closed end and a downstream open end, and wherein at least one of the filter elements is coupled to the termination block such that the downstream open end protrudes from a surface of the termination block in a direction toward the sample chamber.

18. (Previously Presented) The system of claim 23, wherein the at least one filter element includes an upstream closed end and a downstream open end, and wherein all of the filter elements are coupled to the termination block such that the downstream open ends do not protrude from a surface of the termination block.

19. (Previously Presented) The system of claim 23, wherein the at least one filter element includes an upstream closed end and a downstream open end, wherein the housing includes a filter chamber defined therein in which at least the upstream closed ends of the at least one filter element is located, wherein the body section includes a conduit communicating the sample chamber with a downstream end of the termination block, and wherein a diameter of the filter chamber and a diameter of the conduit are substantially the same.

20. (Previously Presented) The system of claim 23, wherein the at least one filter element includes an upstream closed end and a downstream open end, and wherein a plurality of filter elements are coupled to the termination block such that the downstream open ends of the plurality of filter elements are disposed in a linear array.

21. (Previously Presented) The system of claim 12, wherein the filter elements are hollow and are formed at least in part from a hydrophobic material.

22. (Previously Presented) The gas sampling assembly of claim 1, further comprising a termination block positioned in the body section of the sample chamber so as to form a seal across an upstream end region of the sample collection portion, wherein the at least one filter element is coupled to the termination block.

23. (Previously Presented) The system of claim 12, further comprising a termination block positioned in the body section of the sample chamber so as to form a seal across an upstream end region of the sample collection portion, wherein the at least one filter element is coupled to the termination block.